

# Innovative Technology Transfer Partnership (ITTP)

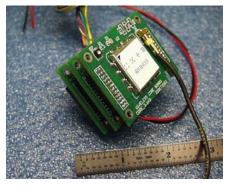


Success Story

## NIVIS TAKES NASA WIRELESS TECHNOLOGY TO NEW MARKETS

### **Description of Innovation**

Nivis LLC of Atlanta, Georgia has licensed NASA's "Wireless Instrumentation System and Power Management Scheme" (KSC-12386). This patent pending highperformance, low-cost, wireless data acquisition and control system was developed at Kennedy Space Center (KSC). The system is designed with sensors that operate in a network configuration, allowing for decisions to be made at the sensor level rather than at a centralized location. A modulate design adds flexibility to the system by allowing it to be easily reconfigured for different types of sensors. The system employs low-power radio frequency (RF) communication links and meets stringent requirements for reliability, data integrity, and power consumption. The power management scheme allows the wireless remote stations to be operated on battery power, a combination of efficient and smart power utilization. Nivis creates components to remotely monitor and control industrial devices deployed in the field. Nivis builds business intelligence systems by integrating these components with wireless, industrial data acquisition, process control and Internet technologies.





Prototypes

### **Commercial Benefits**

The "Wireless Instrumentation System and Power Management Scheme" has many applications in aerospace and can be used by Kennedy Space Center and other NASA centers. Because this system can be installed in locations where cabling is not an option, the system is attractive to many different commercial industries as well. For instance, the technology can provide enhanced wireless data acquisition and control for the department of defense as a data communication links for test ranges and launch facilities; in commercial automation systems by providing real-time monitoring and control of security and surveillance systems, alarms, HVAC, etc.; by utilities companies for remote meter reading; in manufacturing and distribution as an enhancement to industrial automation; and in health care as wireless monitoring equipment.



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## **Partnership Contributions**

Nivis licensed the technology for use in several industries including food and beverage production, factory automation, retail trade and environmental analysis. Initially Nivis is applying the technology to remote date acquisition and control, and automatic meter reading. Nivis has invested over \$180,000 into the development of new products incorporating the NASA technology for this purpose. Another value of licensing the NASA wireless technology to Nivis is their reduction in the product development time and costs, and a quicker penetration of this and future markets.

#### ITTP Role

The KSC Technology Transfer Office was able to successfully complete the negotiation and signing of a Partially Exclusive Patent License Agreement with Nivis LLC of Atlanta, Georgia for the manufacturing and sale of the "Wireless Instrumentation System and Power Management Scheme Therefore". Nivis became aware of the technology through a joint marketing effort from John Mills, Southeast Regional Technology Transfer Center (SERTTC), at the Georgia Institute of Technology and Mark Obenshain, Research Triangle Institute (RTI). The lead was forwarded to Brian Sauser, ASRC Aerospace, at KSC to help facilitate and expedite the prosecution, negotiation and execution of the license agreement.

#### **ITTP Contact**

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## **Industry Contact**

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